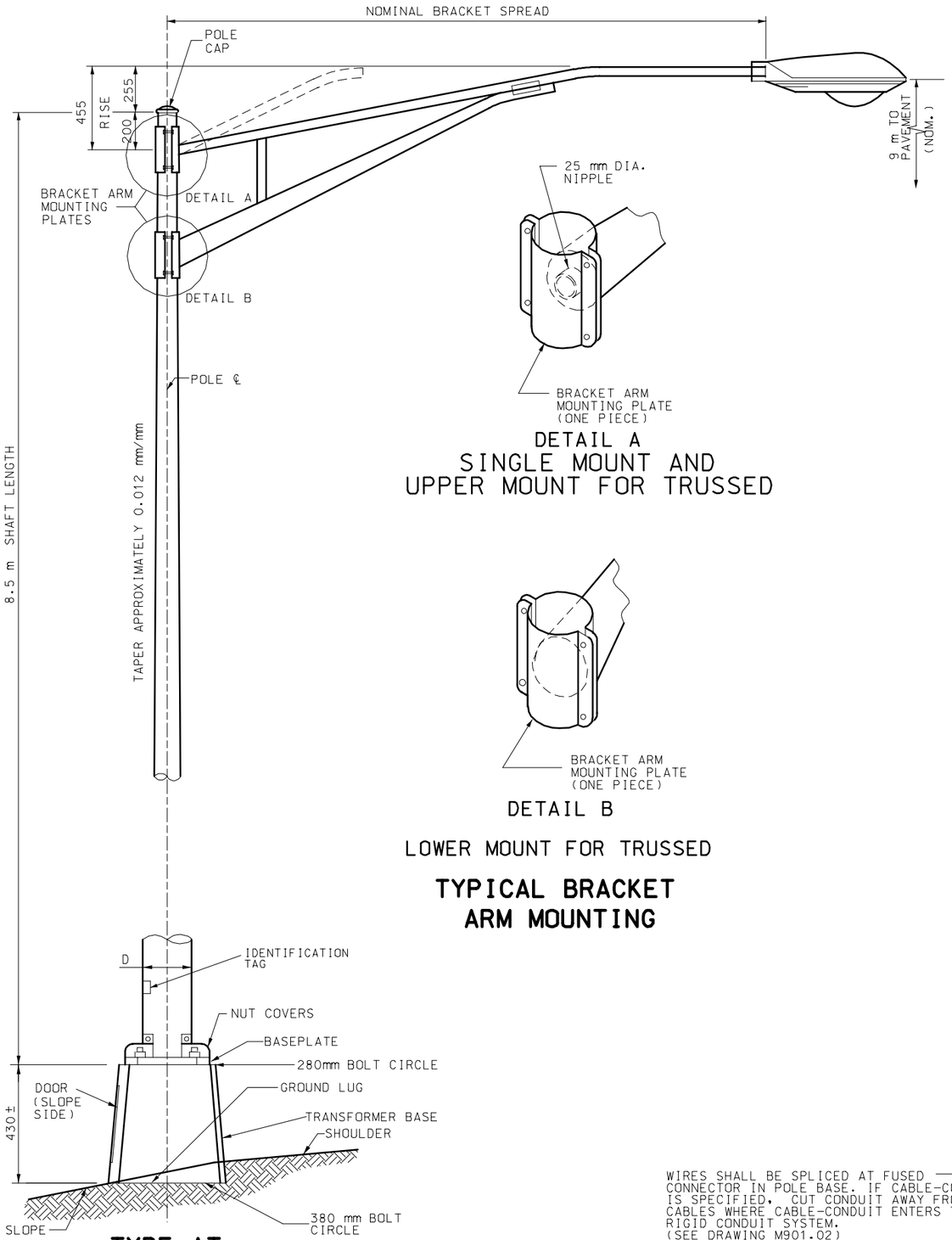


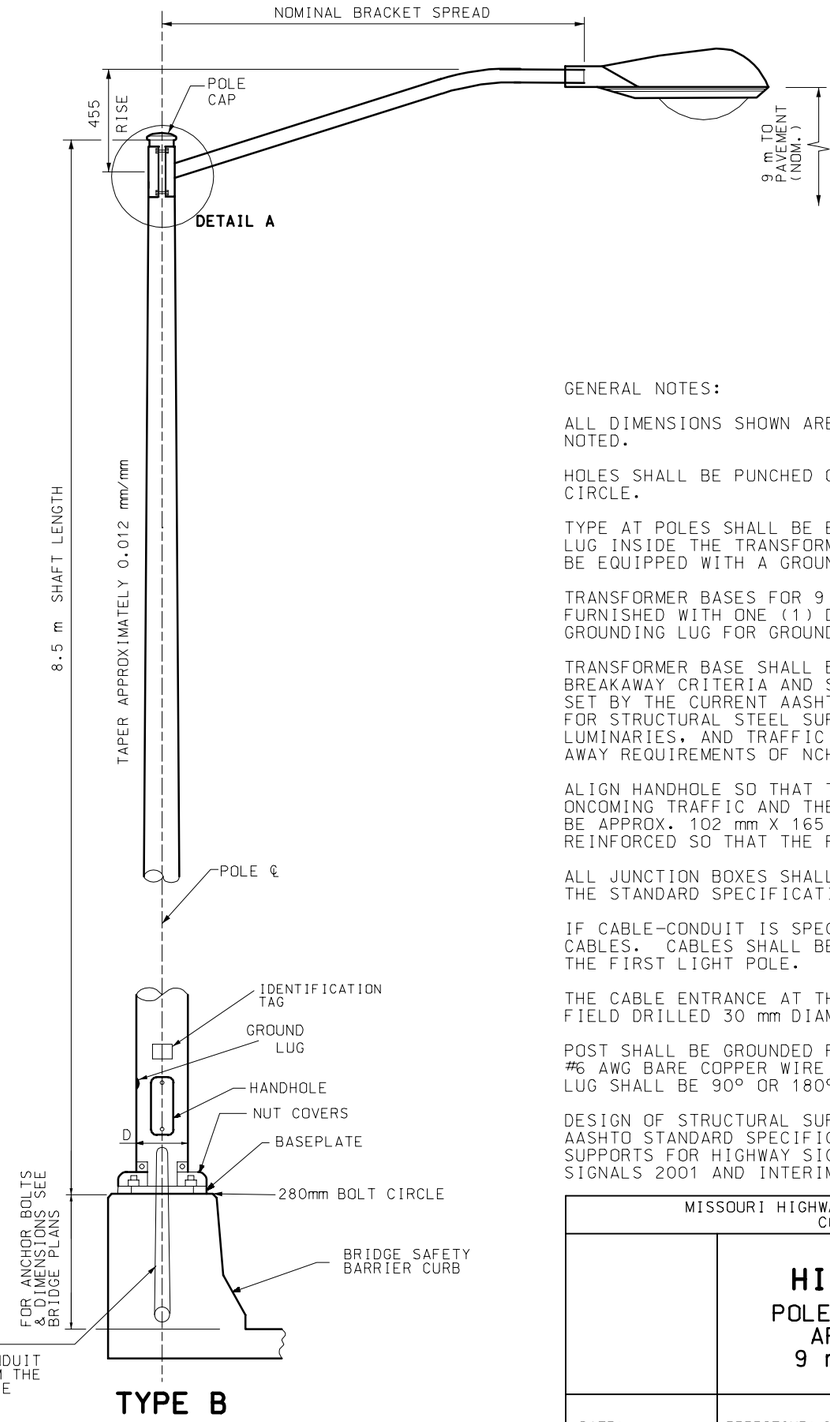
DETAIL A
SINGLE MOUNT AND
UPPER MOUNT FOR TRUSSED

DETAIL B

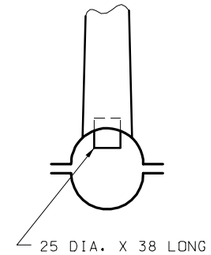
LOWER MOUNT FOR TRUSSED

TYPICAL BRACKET ARM MOUNTING

TYPE AT



TYPE B



PLAN VIEW OF DETAIL A

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

HOLES SHALL BE PUNCHED ONLY FOR SPECIFIED BOLT CIRCLE.

TYPE AT POLES SHALL BE EQUIPPED WITH THE GROUNDING LUG INSIDE THE TRANSFORMER BASE. TYPE B POLES SHALL BE EQUIPPED WITH A GROUNDING LUG INSIDE THE POLE.

TRANSFORMER BASES FOR 9 m MOUNTING HEIGHT SHALL BE FURNISHED WITH ONE (1) DRILLED AND TAPPED HOLE AND GROUNDING LUG FOR GROUNDING EQUIPMENT.

TRANSFORMER BASE SHALL BE CERTIFIED AS MEETING THE BREAKAWAY CRITERIA AND STRUCTURAL REQUIREMENTS AS SET BY THE CURRENT AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL STEEL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS" AND MEET THE BREAK-AWAY REQUIREMENTS OF NCHRP 350.

ALIGN HANDHOLE SO THAT THE POLE IS BETWEEN THE ONCOMING TRAFFIC AND THE HANDHOLE. HANDHOLE SHALL BE APPROX. 102 mm X 165 mm. HANDHOLE FRAME SHALL BE REINFORCED SO THAT THE POLE STRENGTH IS NOT REDUCED.

ALL JUNCTION BOXES SHALL CONFORM TO SECTION 1062 OF THE STANDARD SPECIFICATIONS.

IF CABLE-CONDUIT IS SPECIFIED, CUT CONDUIT AWAY FROM CABLES. CABLES SHALL BE CONTINUOUS AND UNSPLICED TO THE FIRST LIGHT POLE.

THE CABLE ENTRANCE AT THE BRACKET ARM SHALL BE A FIELD DRILLED 30 mm DIAMETER HOLE.

POST SHALL BE GROUNDED FROM GROUND LUG IN POST WITH #6 AWG BARE COPPER WIRE TO CONDUIT SYSTEM. GROUND LUG SHALL BE 90° OR 180° FROM THE HANDHOLE.

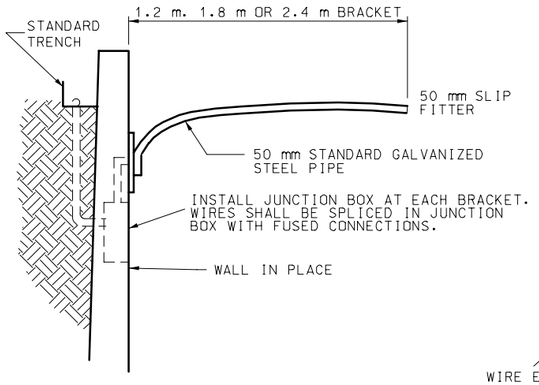
DESIGN OF STRUCTURAL SUPPORTS SHALL COMPLY WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS 2001 AND INTERIMS THROUGH 2003.

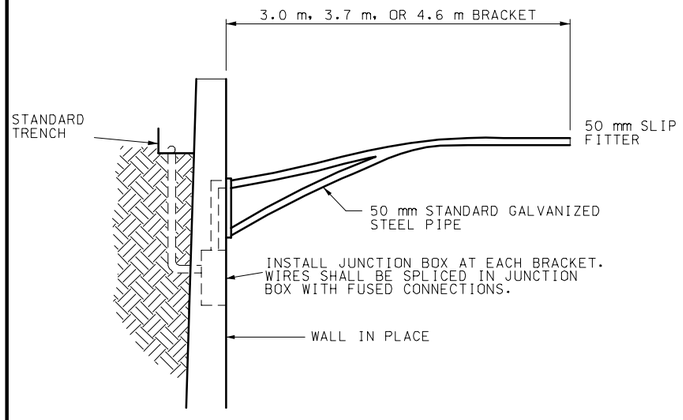
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

HIGHWAY LIGHTING

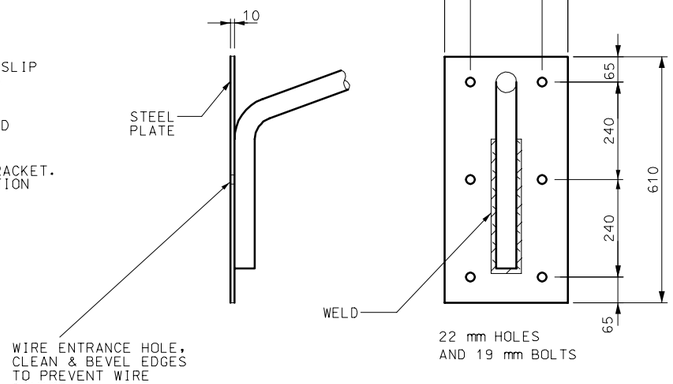
POLES, FOUNDATIONS AND APPURTENANCES FOR 9 m MOUNTING HEIGHT

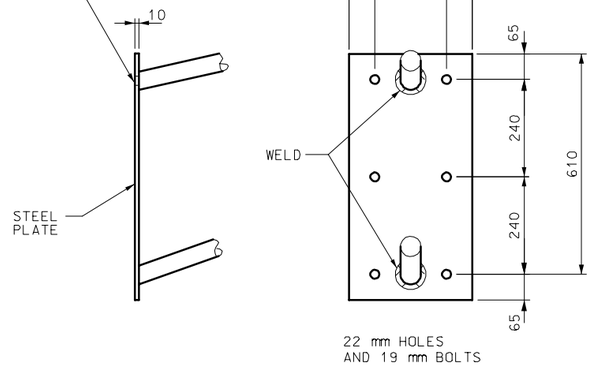
DATE:_____ | EFFECTIVE: 04-01-2005 | **M901.00W** | 1/4



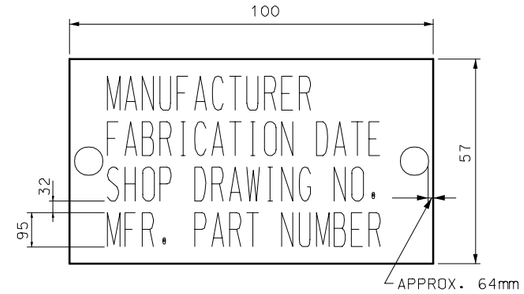


WALL BRACKETS





FACE PLATE DETAILS



IDENTIFICATION TAG

ID TAG NOTE:

TAG SHALL BE ALUMINUM OR STAINLESS STEEL AND ATTACHED TO POLE USING TWO RIVETS OR STAINLESS STEEL DRIVE SCREWS.

FUSE RATING	DESIGNATION HPS	WATTS	INITIAL LUMENS
3 A	S55	150	16,000
TYPE III MEDIUM DISTRIBUTION SEMI-CUTOFF UNLESS OTHERWISE SPECIFIED ON PLANS			

BRACKET SPREAD (m)		1.2-3.0	3.7	4.6
MAX. LUMINAIRE MASS (kg)		34 kg	32 kg	30 kg
MAX. PROJECTED AREA (m^2)		0.31		
SINGLE AND TRUSSED BRACKET ARMS				
LOCATION	LENGTH POLE (m)	BRACKET SPREAD (m)	TRANS. BASE BOLT CIRC. (mm)	D (mm)
SHOULDER	8.5	1.2, 1.8, 2.4, 3.0, 3.7, 4.6	380	203

BRACKET SPREAD (m)		1.2	1.8	2.4
MAX. LUMINAIRE MASS (kg)		34 kg	34 kg	24 kg
MAX. PROJECTED AREA (m^2)		0.31		
SINGLE BRACKET ARM				
LOCATION	LENGTH POLE (m)	BRACKET SPREAD (m)	D (mm)	ANCHOR BOLT DIA. (mm)
BRIDGE SAFETY BARRIER CURB	8.5	1.2m, 1.8 m, 2.4m	203	25

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

HOLES SHALL BE PUNCHED ONLY FOR SPECIFIED BOLT CIRCLE.

TYPE AT POLES SHALL BE EQUIPPED WITH THE GROUNDING LUG INSIDE THE TRANSFORMER BASE. TYPE B POLES SHALL BE EQUIPPED WITH A GROUNDING LUG INSIDE THE POLE.

TRANSFORMER BASES FOR 9 m MOUNTING HEIGHT SHALL BE FURNISHED WITH ONE (1) DRILLED AND TAPPED HOLE AND GROUNDING LUG FOR GROUNDING EQUIPMENT.

TRANSFORMER BASE SHALL BE CERTIFIED AS MEETING THE BREAKAWAY CRITERIA AND STRUCTURAL REQUIREMENTS AS SET BY THE CURRENT AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL STEEL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS" AND MEET THE BREAK-AWAY REQUIREMENTS OF NCHRP 350.

ALIGN HANDHOLE SO THAT THE POLE IS BETWEEN THE ONCOMING TRAFFIC AND THE HANDHOLE. HANDHOLE SHALL BE APPROX. 102 mm X 165 mm. HANDHOLE FRAME SHALL BE REINFORCED SO THAT THE POLE STRENGTH IS NOT REDUCED.

ALL JUNCTION BOXES SHALL CONFORM TO SECTION 1062 OF THE STANDARD SPECIFICATIONS.

IF CABLE-CONDUIT IS SPECIFIED, CUT CONDUIT AWAY FROM CABLES. CABLES SHALL BE CONTINUOUS AND UNSPLICED TO THE FIRST LIGHT POLE.

THE CABLE ENTRANCE AT THE BRACKET ARM SHALL BE A FIELD DRILLED 1-1/4" DIA. HOLE.

POST SHALL BE GROUNDED FROM GROUND LUG IN POST WITH #6 AWG BARE COPPER WIRE TO CONDUIT SYSTEM. GROUND LUG SHALL BE 90° OR 180° FROM THE HANDHOLE.

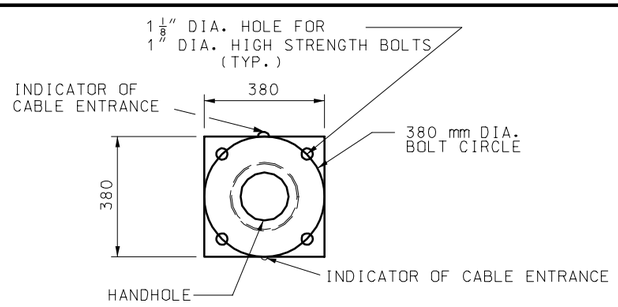
ID TAG HOLES SHALL BE DRILLED INTO POLE PRIOR TO GALVANIZING.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

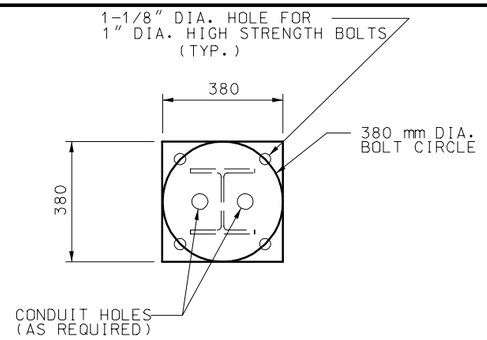
HIGHWAY LIGHTING

POLES, FOUNDATIONS AND APPURTENANCES FOR 9 m MOUNTING HEIGHT

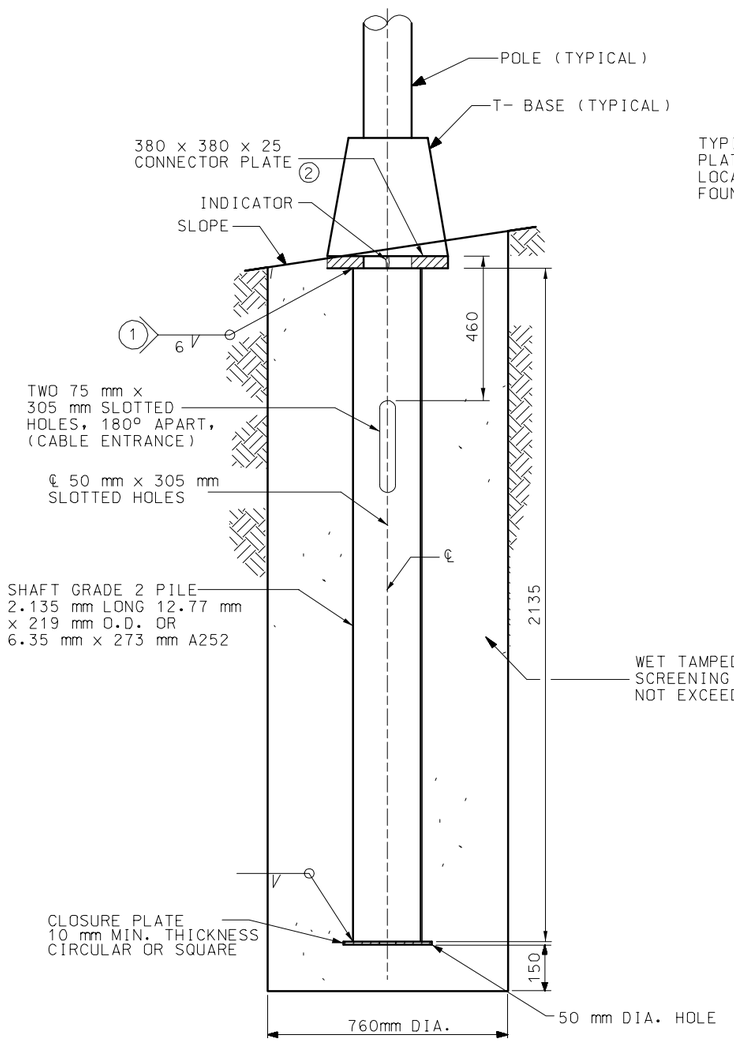
DATE:_____ EFFECTIVE: 04-01-2005 **M901.00W** 2/4



PLAN

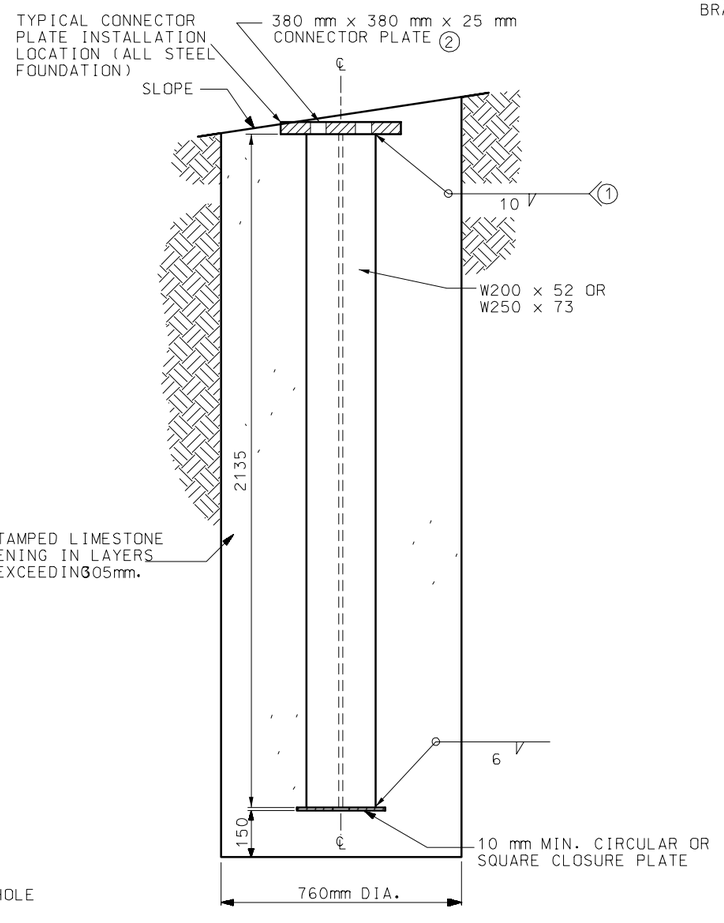


PLAN



ELEVATION

DETAILS OF CIRCULAR STEEL PILE FOUNDATION



WELD 10 mm MIN. CIRCULAR OR SQUARE
CLOSURE PLATE TO OUTSIDE OF EACH FLANGE

ELEVATION

DETAILS OF STEEL "H" PILE FOUNDATION

NOTES:

(1) GRIND WELD AS NECESSARY TO CLEAR BOLT HEAD.

(2) FOUNDATIONS SHALL BE INSTALLED SO THAT CONNECTOR PLATES ARE LEVEL PERPENDICULAR TO THE BRACKET ARM AND SLOPED FOR POLE RAKING PARALLEL TO THE BRACKET ARM.

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

ALL CLASSIFICATIONS ARE ASTM UNLESS OTHERWISE NOTED. SEE STANDARD SPECIFICATIONS FOR CLASSIFICATIONS NOT SHOWN.

ALL CONNECTOR PLATE AND CLOSURE PLATE THICKNESSES SHOWN ARE MINIMUM DIMENSIONS.

ALL ANCHOR BOLTS SHALL BE FULLY GALVANIZED 25 mm DIA. HIGH STRENGTH ANCHOR BOLTS.

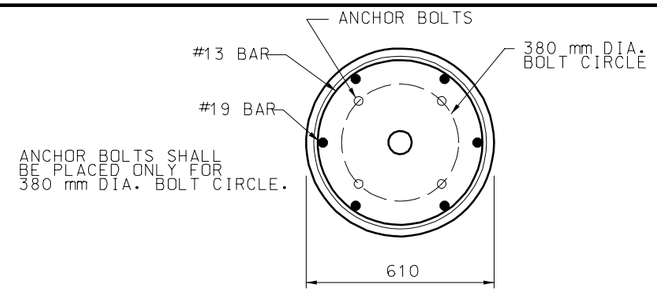
ALL STEEL COMPONENTS SHALL BE HOT DIP GALVANIZED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

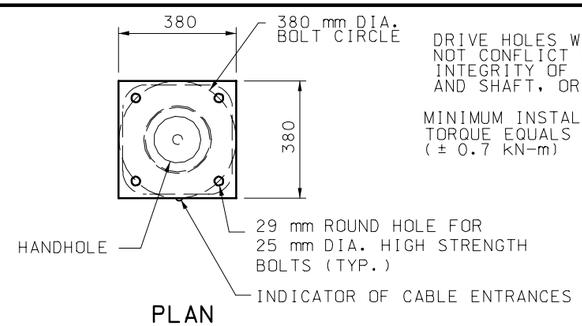
HIGHWAY LIGHTING

POLES, FOUNDATIONS AND APPURTENANCES FOR 9 m MOUNTING HEIGHT

DATE:_____ | EFFECTIVE: 04-01-2005 | **M901.00W** | 3/4



PLAN



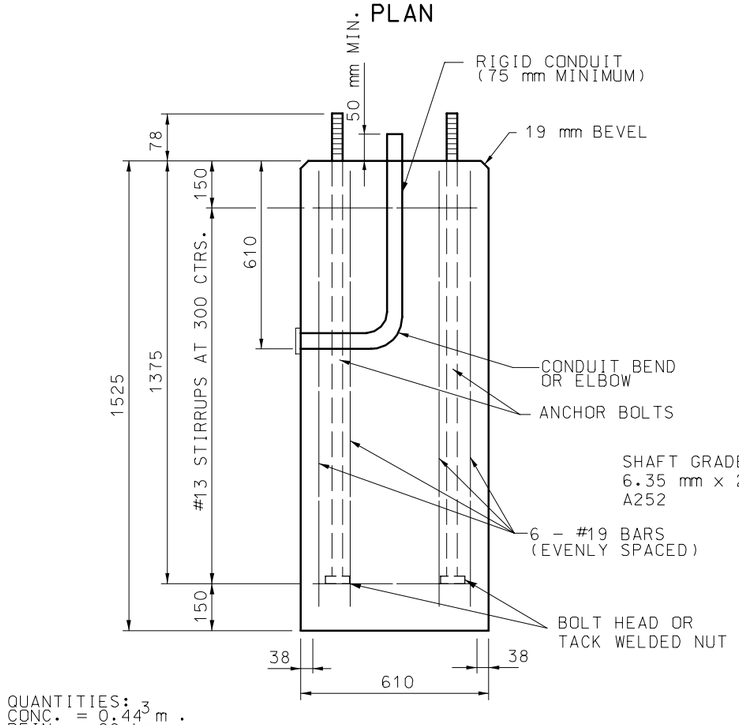
PLAN

DRIVE HOLES WILL BE PERMITTED PROVIDED THAT THEY DO NOT CONFLICT WITH OR COMPROMISE THE STRUCTURAL INTEGRITY OF THE PLATE, THE WELD BETWEEN THE PLATE AND SHAFT, OR THE BOLT HOLES.

MINIMUM INSTALLING TORQUE EQUALS 8.1 kN-m. (± 0.7 kN-m)

NOTES:

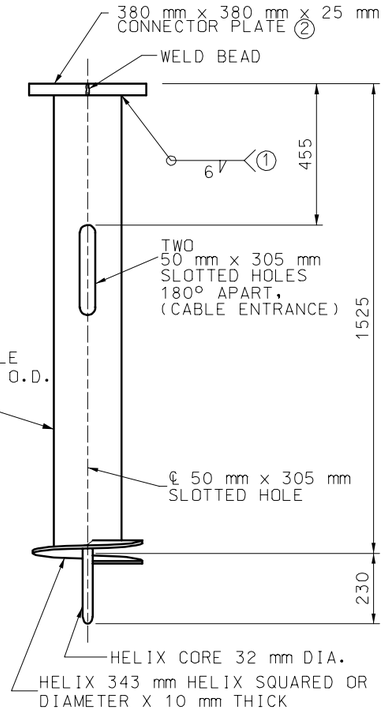
1. GRIND WELD AS NECESSARY TO CLEAR BOLT HEAD.
2. FOUNDATIONS SHALL BE INSTALLED SO THAT CONNECTOR PLATES ARE LEVEL PERPENDICULAR TO THE BRACKET ARM AND SLOPED FOR POLE RAKING PARALLEL TO THE BRACKET ARM.
3. AT THE OPTION OF THE CONTRACTOR THE CONCRETE FOUNDATION MAY BE PRECAST. IF PRECAST, THEY SHALL BE SET IN DRILLED HOLES 915 mm IN DIAMETER AND 150 mm DEEPER THAN THE BOTTOM OF THE CONCRETE FOUNDATION. THE BOTTOM 150 mm OF THE HOLE AND THE REMAINING SPACE AROUND THE FOUNDATION SHALL BE BACKFILLED WITH WET TAMPED LIMESTONE SCREENINGS IN LAYERS NOT EXCEEDING 300 mm.



QUANTITIES:
CONC. = 0.44 m^3 .
REIN. = 29 kg.

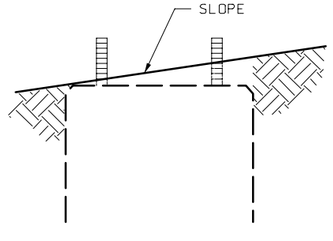
ELEVATION

DETAILS OF CONCRETE FOUNDATION ③

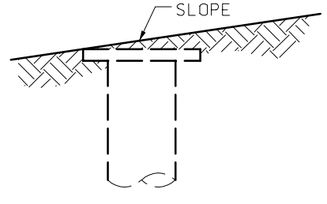


ELEVATION

DETAILS OF SCREW ANCHOR FOUNDATION



CONCRETE FOUNDATION EMBEDMENT



SCREW ANCHOR EMBEDMENT

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

ALL CLASSIFICATIONS ARE ASTM UNLESS OTHERWISE NOTED. SEE STANDARD SPECIFICATIONS FOR CLASSIFICATIONS NOT SHOWN.

ALL CONNECTOR PLATE AND CLOSURE PLATE THICKNESSES SHOWN ARE MINIMUM DIMENSIONS.

ALL ANCHOR BOLTS SHALL BE FULLY GALVANIZED 25 mm DIA. HIGH STRENGTH ANCHOR BOLTS.

ALL STEEL COMPONENTS SHALL BE HOT DIP GALVANIZED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

HIGHWAY LIGHTING

POLES, FOUNDATIONS AND APPURTENANCES FOR 9 m MOUNTING HEIGHT

DATE:_____ | EFFECTIVE: 04-01-2005 | M901.00W | 4/4